

DOCUMENT RESUME

ED 081 751

SP 006 876

AUTHOR Van Scotter, Richard D.; Smith, Mary Lee  
TITLE Evaluation in the UPSTEP Program (University of Colorado).  
INSTITUTION Colorado Univ., Boulder. Undergraduate Pre-Service Teacher Education Program.  
NOTE 5p.  
EDRS PRICE MF-\$0.65 HC-\$3.29  
DESCRIPTORS Evaluation; \*Evaluation Methods; \*Evaluation Techniques; \*Program Evaluation; Teacher Education  
IDENTIFIERS UPSTEP

ABSTRACT

Evaluation figures as an important component in the Undergraduate Pre-Service Teacher Education Program (UPSTEP) at the University of Colorado. Its role is as follows: a) to help surface new instructional ideas that are latent in the experiences of staff members and articulate these ideas into program goals, b) to help shape program objectives based on the needs of teacher education, c) to assess the effectiveness of various component and general program operations, and d) to facilitate program changes based on the assessment of operations. During the first year of the program, evaluation has been almost exclusively formative, that is, information has been gathered about the program while it is developing. However, evaluation demands an assessment of program outcomes, and to this end the processes and product of the program have been assessed. (The remainder of the paper is devoted to sections describing the process evaluation and product evaluation of UPSTEP.) (Related documents are SP 006 874, 006 875, and 006 867.)  
(JA)

# UNDERGRADUATE PRE-SERVICE TEACHER EDUCATION PROGRAM

Hellems Annex 334, University of Colorado, Boulder, Colorado 80302 (303) 443-2211 Ext. 8796

JUL 9 1973

## EVALUATION IN THE UPSTEP PROGRAM (University of Colorado)

Richard D. Van Scotter  
and

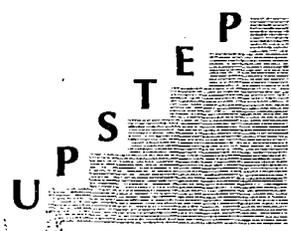
Mary Lee Smith

U S DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION  
THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIGIN-  
ATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT  
OFFICIAL NATIONAL INSTITUTE OF  
EDUCATION POSITION OR POLICY

The new undergraduate teacher training program at the University of Colorado (UPSTEP) can be described as either an evaluators paradise or inferno. The potential contribution of evaluation in this program is practically unlimited. In fact, UPSTEP is more like five separate programs searching their particular identities in the context of more encompassing common goals. The architects of the program did envision a singular overriding framework. However, given the diversity and capability of its leadership, the implementation of this unitary concept has not proceeded unquestioned. The role of evaluation in the program therefore is to:

- 1) Help surface new instructional ideas that exist latent in the experiences of staff members, and articulate these ideas into program goals.
- 2) Help shape program objectives based on the needs of teacher education.
- 3) Assess the effectiveness of various component and general program operations.
- 4) Facilitate program changes based on the assessment of operations.

Program evaluation during this first year has been almost exclusively formative, in contrast to summative. Formative evaluation refers to gathering information about the program while it is developing, and discovering weaknesses and strengths. This provides a systematic basis for program revision. Summative evaluation concerns the



ED 081751

SP 006 876

assessment of final program outcomes or finished products. Initial emphasis on formative evaluation clearly was in order; the needs of the program indicated that decision-makers (component directors and staff) required information related to its development. This position is not one unique to UPSTEP but rather a necessary procedure of any new educational program.

Although the major emphasis has been on formative evaluation, sound evaluation demands an assessment of program outcomes. To this end, the evaluation procedure has assessed both processes-- what is taking place in the program, and products--what outcomes are being produced in the program.

#### Process Evaluation

The basic rationale for the use of evaluation in the program from the start is that sound decisions on the part of its developers are necessary if the new program is to successfully accomplish its objectives. The process of developing an educational program such as UPSTEP involves a series of decision points that are critical to the progress and direction of the program. In order to make sound decisions, the developer must have knowledge of available alternatives.

The various components of UPSTEP have continuously been at different stages of development. The objectives that are developed, the problems that arise, the questions that are asked and the decisions that have to be made, differ from component to component. This situation demands that the evaluation proceed in a component by component fashion, but it also suggests that the program develop a procedure whereby the components can efficiently proceed toward development of program-wide aims and goals.

During this first year, the Mathematics and Secondary Education components have been in the pre-operational stage of development. The first step for these two components was to devise a means of assessing the needs of teacher education in their respective areas. For example, the staff of the Math component is conducting a national survey of the needs, goals, and directions of math education programs. Similarly, the Secondary Education component surveyed its constituents (former

students, public school teachers, graduate students and faculty members) to determine needs for change in secondary education. Out of this, the components began to formulate objectives that will guide the development of their educational program.

The Secondary Education component began the construction of a personalized, experiential, modular-based program. Based on the results of an experiment comparing methods of teaching, in addition to the aforementioned needs assessment, the Math component will design its courses for prospective teachers. In the process both components will be developing a formalized evaluation procedure to be used when their programs become operational. This procedure will be concerned with obtaining the information needed to determine if their program is progressing effectively and is accomplishing its specified outcome objectives. This work also will entail the development of instruments (or the search for existing evaluative instruments) to obtain this information.

The operational components (Science, Social Science, and Elementary Education), during the first year, needed to clarify the objectives under which they were operating. This process has helped to define the more encompassing goals of the entire program. That is, evaluation serves to identify aspects of the program held in common by the various components.

The operational components then proceeded to develop evaluative questions to elicit information their staff requires to determine the effectiveness of the program. In turn, based on these questions, the components have designed and administered instruments eliciting appropriate information. This information then is being used as "grist" for revisions and innovations in program operations.

During the second year of operation it is planned that all components will staff their own evaluation monitoring committees to carry out the development of evaluation plans, administration of evaluation instruments, and the interpretation and reporting of results. These monitoring committees will have the work of the previous year on which to build, basing the new measures on the needs of the individual

component, The monitoring committees will be composed of at least one faculty member and one TA from the component, plus the program evaluator. All component evaluation monitoring committees will be responsible to a central evaluation committee. This committee is made up of faculty members and graduate students selected by the UPSTEP executive committee and assigned the task of providing conceptual leadership in evaluation and providing a model for conducting these activities in the program as a whole.

### Product Evaluation

Product evaluation has proceeded more slowly than process evaluation. The aspect of program evaluation involves, if not the more difficult task, the more patient task of either selecting or developing instrumentation appropriate to the goals of the program. This instrumentation presumes that functional program objectives have been clearly formulated. The first step toward sound product evaluation is the development and clarification of the program's objectives; a process that has been an on-going task for the first year operations.

At least one component (Social Science) has begun to gather data to be used in product evaluation. This component developed an instrument to test the student's understanding of economic concepts during the Fall semester. They currently are working on measures related to the knowledge and skills of political science, which is the content focus of the Spring semester. The component also has been studying the potential use of other instruments related to student attitudes towards teaching, student beliefs about teaching, and the conceptual behavior of prospective teachers.

UPSTEP will be prepared to carry out a major product evaluation during the second year of operation. With program and individual component objectives constructed and clarified, subsequent search or development of outcome-related measures can proceed in an efficient manner. A main function of the program evaluator during this second year will be to oversee this product evaluation. The primary responsibility for instrument construction, data gathering and data analysis

will rest with the component evaluation committees. The program evaluator will guide this effort and assure the program-wide outcome goals are sufficiently assessed.

#### Other Considerations

It is also necessary for the evaluation to be concerned with those aspects of the program which integrate the various components. For example, the effectiveness of the Faculty/TA seminars has been a major consideration of evaluation during the initial year. The shape and direction of these seminars has had significant impact on the nature of the program. During the second year the program evaluator will continue to monitor the progress of these seminars, in terms of both process and product criteria.

The evaluation process can be supplemented with related research or evaluation conducted by program doctoral students fulfilling dissertation requirements. The evaluator can identify program areas in need of study and assist the student's inquiry efforts into such problems.

A final, but nonetheless strategic function of evaluation will be to constantly appraise the needs of teacher education as a whole. To this end the evaluator must review the literature on the subject and ask, "To what extent is the program addressing itself to trends in teacher education?" Based on syntheses of the literature, it is the function of the product evaluator to suggest revisions of program objectives which in turn can foster changes in program operations.